# BergStak® 0.5mm Mezzanine Connector

## Expanded product range

## RELIABLE SOLUTION FOR HIGH DENSITY APPLICATIONS

Amphenol's BergStak® 0.5mm is a comprehensive and versatile board-to-board solution designed for reliable and high-density applications. The unique design of scoop-proof housing ensures terminals are not damaged during mating.

- 0.5mm double row contact for high density connector
- Scoop-proof housing ensures terminals are not damaged during the mating
- PCB locator pegs option helps to ease manual assembly

### TARGET MARKETS

| FEATURES | BENEFITS |
|---|---|
| • 0.5mm double row contact | • High density connector |
| • Scoop-proof housings | • Ensures terminals are not damaged during mating |
| • Metal hold-down option | • Higher retention force |
| • Locating pegs option | • Eases manual assembly |
| • 3mm to 6mm stack heights in 0.5mm increments<br>• 10 to 80 positions in 10 position increments | • Wide range of sizes and stack heights supports different applications |
| • Available in UL94 V0 | • High flammability rating |
| • USCAR-2 V1 shock and vibration qualified | • Suitable for automotive applications |
| • RoHS compliant and lead-free | • Meets environmental, health and safety requirements |

# TECHNICAL INFORMATION

## MATERIAL

- Housing: High Temperature Thermoplastic UL94V-0, LCP, Black
- Terminal: Copper alloy
- Metal hold-down: Copper Alloy
- Plating: Gold Flash

## MECHANICAL PERFORMANCE

- Mating Force: 1.47N per pin max.
- Unmating Force: 0.15N per pin min.
- Retention Force: 0.98N per pin min.
- Durability: 50 mating cycles
- Shock and Vibration: USCAR-2 V1

## ELECTRICAL PERFORMANCE

- Current Rating per Contact: 0.5A per contact
- Insulation Resistance: 500MΩ min.
- Voltage Rating: 50 VAC

## ENVIRONMENTAL

- Salt Spray Test:
  - 5±1% salt concentration 48±4 hours 35±2°C
- Thermal Shock: -65°C to +125°C
- High Temperature: 85±2°C for 96 hours
- Humidity:
  - Temperature: 40±2°C 96 hours
  - Relative Humidity: 90-95%
  - Duration: 96 Hours

## SPECIFICATIONS

- Product Specification: GS-12-1298

## PACKAGING

- Tape & Reel

## TARGET MARKETS/APPLICATIONS

 Automotive

 Digital Video Camera

 Measurement Equipment
Mobile Payment Device
Point of Sales Equipment
Portable Industrial Terminal
Surveillance Camera

 Medical Device

# PART NUMBERS

| Position | Description | Connector Height (mm) | Stack Height (mm) | Part Numbers |
|---|---|---|---|---|
| 10~80 | Plug 1 | 2.3 | 3.0 | 10132797–XX1100LF |
| XX=01/02/03/04/05/06/08 | Receptacle 1 | 2.15 | | 10132798–XX1100LF |
| 10~60 | Plug 3 | 3.3 | 4.0 | 10132797–XX1300LF |
| XX=01/02/03/04/05/06 | Receptacle 1 | 2.15 | | 10132798–XX1100LF |
| 10~60 | Plug 5 | 4.3 | 5.0 | 10132797–XX5100LF |
| XX=01/02/03/04/05/06 | Receptacle 2 | 2.7 | | 10132798–XX2100LF |
| 10~60 | Plug 7 | 5.3 | 6.0 | 10132797–XX7100LF |
| XX=01/02/03/04/05/06 | Receptacle 2 | 2.7 | | 10132798–XX2100LF |

*For more sizes and configurations, please contact our Amphenol sales representatives.

# AVAILABLE STACK HEIGHTS

# BergStak® 0.5mm Mezzanine Connector

## P/N SELECTOR– RECEPTACLE

| 10132798 | — | AA | B | C | D | E | F | — | LF |

| AA | Position |
|----|----------|
| 01 | 2X05 |
| 02 | 2X10 |
| 03 | 2X15 |
| 04 | 2X20 |
| 05 | 2X25 |
| 06 | 2X30 |
| 08 | 2X40 |

| B | Description |
|---|-------------|
| 1 | Receptacle 1 |
| 2 | Receptacle 2 |

| F | Customer Code |
|-------|---------------|
| Blank | Standard P/N |
| V | Apply for special customer |

| E | Packaging |
|---|-----------|
| 0 | Tape and Reel without cap |

| D | Polarization Peg | Hold Down |
|---|------------------|-----------|
| 0 | Yes | Yes |
| 1 | No | Yes |
| 2 | Yes | No |
| 3 | No | No |

| C | Plating: Contact Area/Solder Tail Area |
|---|----------------------------------------|
| 1 | 1 ~3µ" Au on contact area over 50µ" Ni min. Gold flash on solder tail over 50µ" Ni min. |

## P/N SELECTOR– HEADER

| 10132797 | — | AA | B | C | D | E | F | — | LF |

| AA | Position |
|----|----------|
| 01 | 2X05 |
| 02 | 2X10 |
| 03 | 2X15 |
| 04 | 2X20 |
| 05 | 2X25 |
| 06 | 2X30 |
| 08 | 2X40 |

| B | Description |
|---|-------------|
| 1 | Receptacle 1 |
| 2 | Receptacle 2 |
| 1 | Receptacle 1 |
| 2 | Receptacle 2 |
| 1 | Receptacle 1 |
| 2 | Receptacle 2 |
| 2 | Receptacle 2 |

| F | Customer Code |
|-------|---------------|
| Blank | Standard P/N |
| V | Apply for special customer |

| E | Packaging |
|---|-----------|
| 0 | Tape and Reel without cap |

| D | Polarization Peg | Hold Down |
|---|------------------|-----------|
| 0 | Yes | Yes |
| 1 | No | Yes |
| 2 | Yes | No |
| 3 | No | No |

| C | Plating: Contact Area/Solder Tail Area |
|---|----------------------------------------|
| 1 | 1 ~3µ" Au on contact area over 50µ" Ni min. Gold flash on solder tail over 50µ" Ni min. |